

ABSTRACT

There is provided a cylinder injection type internal combustion engine capable of performing stratified charge operation at the time of a vehicle speed of 120 km/h and/or an engine rotational speed of 3200 rpm to enhance the fuel efficiency and/or to observe the emission regulations. In the internal combustion engine, a stratum of air and/or air flow is formed between a fuel spray injected from an injection valve and the top face of a piston and/or the wall surface of a combustion chamber, and a face shape contrived to guide the air flow is formed on the top face of the piston.

Also, the stratified charge operation can be performed even at the time of cold start or cranking.